

**Notice of Allowability**

Application No.

10/724,893

Examiner

Toan Ton

Applicant(s)

LIM, JOO SOO

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephonic interview on 05/10/04.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 02 December 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Nonelected claims 7-8 (without traverse) have been canceled.

A new title is read as follows: --A TFT-LCD device comprising test pixels, black matrix elements, common voltage line formed within a particular dummy region--.

## **REASONS FOR ALLOWANCE**

2. Claims 1-6 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not anticipate nor render obvious to one ordinary skilled in the art an active-matrix (employing TFTs) liquid crystal display device comprising a combination of various elements as claimed, more specifically, a combination of the followings: a common voltage line formed within the first dummy region, a plurality of test pixels formed within the first dummy region each having a pixel electrode, a first black matrix formed within the second dummy region having openings corresponding to the test pixels, and a second black matrix formed within the second dummy region to over the pixel electrodes of the test pixels by a plurality of different widths.

Sawasaki ('834) discloses an active-matrix LCD device comprising dummy test patterns with light shield patterns. However, Sawasaki fails to disclose a combination of the followings: a common voltage line formed within the first dummy region, a plurality of test pixels formed within the first dummy region each having a pixel electrode, a first black matrix formed within the second dummy region having openings corresponding to the test pixels, and a second black matrix formed within the second dummy region to over the pixel electrodes of the test pixels by a plurality of different widths.

### **CONCLUSION**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shiga (JP '357) discloses an active-matrix LCD comprising dummy common electrode, dummy drain electrode, dummy pixel electrodes, dummy light shielding films and dummy color filter layer.

Kim ('367) discloses redundant pixels testing the display pixels for electrical defects and disabling the redundant pixels if the display pixels are defect free.

Shirahashi ('301) discloses an active-matrix LCD comprising peripheral dummy lines.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **CONTACT INFORMATION**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 19, 2004

  
ANTON  
PRIMARY EXAMINER